



## OWNER'S MANUAL

MODEL: PS-001 PRO STEAMER

REVISED JAN, 2006

\*PLEASE RETAIN FOR FUTURE REFERENCE



Certified for use in Canada and the United States of America.

Certified to / a.: CSA 1.8 2004, CSA 1.18 2004

Conforms to / Conforme a: ANSI std Z21.89 2004 / ANSI std Z83.112004

**CONGRATULATIONS!** You are the proud new owner of the finest commercial mobile steamer available. CROWN VERITY Inc. Pro steamers are designed to last a lifetime...or more! With proper care and maintenance, your steamer will provide unparalleled performance and many years of outdoor cooking pleasure.

Please read this manual carefully to ensure safe operation and to maximize your cooking enjoyment. It is your responsibility to see that your steamer is properly assembled, installed, and cared for. Failure to follow instructions in this manual could result in serious bodily harm and/or property damage.

**WARNING: Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this equipment.**

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### **FOR YOUR SAFETY**

#### **IF YOU SMELL GAS:**

- 1) Shut off gas supply to appliance.
- 2) Extinguish any open flame.
- 3) Open lid or remove storage cover(s).
- 4) If odour continues, immediately call your Fire Department.

**DO NOT** store or use gasoline or other flammable vapours and liquids in the vicinity of this or any other appliance.

**CAUTION!** Steam can cause severe burns, use caution when operating the Pro Steamer. Wear protective gloves, never stand directly in front of the Pro Steamer when opening the lid, allow water to cool completely before draining. Read all warnings and instructions before operating the Pro-Steamer.

**CAUTION!** When lighting the burner, always hold a lit match or extended lighter next to the burner head before opening the control regulator. Open the control regulator slowly until the burner ignites, then slowly and gradually increase the pressure to the desired heat setting. If ignition does not immediately occur, turn control regulator to closed position, close L.P cylinder valve and wait 5 minutes before attempting to re-light. Keep persons and combustibles such as clothing well away from burner access hole.

#### **WARNING!**

- An LP cylinder not connected for use shall not be stored in the vicinity of this or any other appliance.
- This appliance shall only be used in a well ventilated space and shall not be used in a building, garage, or any other enclosed area.

**WARNING!** Keep any electrical supply cord and fuel supply hose(s) away from any hot surfaces.

**DO NOT** use your steamer if there is evidence of damage (cuts, cracks, burns) or excessive wear to the gas hose.

**DO NOT** obstruct the flow of combustion and ventilation air to the burner.

**DO NOT** place combustibles on the under shelf. Do not stand on the under shelf as it could result in injury or irreparable damage.

**DO NOT** leave Pro Steamer unattended while in operation.

**DO NOT** allow children to play on or near this appliance.

**DO NOT** use this appliance under the influence of alcohol or drugs.

**DO NOT** use this appliance until you have read and understood all of the information in this manual.

## **INSTALLATION**

THE INSTALLATION OF THIS APPLIANCE MUST BE IN ACCORDANCE WITH:

- 1) All applicable local codes, or in the absence of local codes;
- 2) i) Canada: must conform to current National Standard CAN/CGA B149.1&.2 natural gas/propane installation code.
- ii) U.S.A.: must conform to national Fuel Gas Code, ANSI Z223.1, 1988 or latest edition.

### **WARNING!**

**DO NOT** operate this appliance under overhead, combustible construction. This appliance shall be used only in a well-ventilated space and shall not be used in a building, garage, or any other enclosed area.

### **MINIMUM CLEARANCE TO COMBUSTIBLE MATERIALS:**

- **18 inches from all sides**
- Always keep the surrounding area clear of all combustible materials, gasoline, or other flammable liquids
- This appliance is suitable for use on combustible floors.
- Always level your Pro Steamer front to back & side to side. .
- Use your Pro Steamer OUTDOORS in a well-ventilated space, 10 ft. from dwellings or outbuildings.
- Casters must be locked when appliance is in operation.

**ALWAYS PLACE THE PRO STEAMER ON A FIRM, LEVEL SURFACE WHEN OPERATING**

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**Certified to / a.: CSA 1.8 2004, CSA 1.18 2004**

**Conforms to / Conforme a: ANSI std Z21.89 2004 / ANSI std Z83.112004**

This outdoor cooking gas appliance is not for installation in or on recreational vehicles and/ or boats.

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## **PRIOR TO USE AND LIGHTING INSTRUCTIONS**

### **WARNING!**

**Steam can cause severe burns, use caution when operating the Pro Steamer, Wear protective gloves, never stand directly in front of the Pro Steamer when opening the lid, and read all warnings and instructions before operating the Pro- Steamer.**

### **WARNING!**

**Fill the water tank to the fill line and maintain this level at all times.**

- Steam can cause severe burns, use caution, and stand away and to the side when opening the lid.
- Do not use your Pro Steamer until you have read and understood all the information in this manual, and you are assured:
- There are no leaks in the gas supply system (see “Leak Testing” section).
- The burner is properly assembled
- That any electrical supply cords and/or gas supply hoses are kept away from all hot surfaces.
- Your Pro Steamer is positioned in a safe location (see “Installation” section).

### **CAUTION!**

- Use caution when lighting. Keep face and body away from burner. Open regulator valve slowly and use a long lighter.
- Make sure regulator valve is OFF to start, then slowly open LP cylinder valve. Do not snap open.
- Hold a lit BBQ lighter next to the burner cup and slowly open the control regulator until the burner lights.

**If ignition does not immediately occur, turn control regulator to closed position, close L.P cylinder valve and wait 5 minutes before attempting to re-light**

## **LIGHTING AND OPERATION INSTRUCTIONS**

**CAUTION!** Steam can cause severe burns, use caution when operating the Pro Steamer. Wear protective gloves, never stand directly in front of the Pro Steamer when opening the lid, allow water to cool completely before draining. Read all warnings and instructions before operating the Pro-Steamer.

**CAUTION!** When lighting the burner, always hold a lit match or extended lighter next to the burner head before opening the control regulator. Open the control regulator slowly until the burner ignites, then slowly and gradually increase the pressure to the desired heat setting. If ignition does not immediately occur, turn control regulator to closed position, close L.P cylinder valve and wait 5 minutes before attempting to re-light. Keep persons and combustibles such as clothing well away from burner access hole

- 1) FILL WATER TANK TO FILL LINE, MAINTAIN WATER LEVEL AT ALL TIMES
- 2) GAS CYLINDER AND REGULATOR MUST BE IN OFF POSITION
- 3) OPEN GAS CYLINDER VALVE, AND PLACE A LIT MATCH TO THE BURNER HEAD.
- 4) SLOWLY OPEN THE CONTROL REGULATOR UNTIL THE BURNER IGNITES
- 5) OPERATE BURNER AT HIGH SETTING UNTIL WATER BOILS THEN ADJUST TO LOWER SETTING
  - IF IGNITION DOES NOT TAKE PLACE IMMEDIATELY, TURN OFF CONTROL REGULATOR AND L.P. CYLINDER VALVE, WAIT 5 MINUTES AND REPEAT LIGHTING PROCEDURE.
  - Do not force the CONTROLS; damage to the Regulator valve may result.
  - Visually check the flame every time you light your Pro Steamer. A good flame should be mostly blue. If the flame is abnormally small or mostly yellow: shut off the Pro Steamer and check the burner for blockage.

## **SHUT DOWN INSTRUCTIONS:**

To prepare your charbroiler for long term storage, follow these steps:

- 1) Turn the control regulator to the OFF position.
- 2) Turn the LP cylinder valve to the OFF position.
- 3) Ensure all burners are extinguished.
- 4) Disconnect LP CYLINDER (s) from the Pro Steamer when not in use.
- 5) Take care; your Pro Steamer is still hot
- 6) Drain your Pro Steamer appropriately only after is allowed to cool

## **TIPS AND TECHNIQUES**

### **BREAK-IN -**

Before cooking in your Crown Verity Inc. Pro Steamer for the first time; we suggest a thorough wash-down and boil-off. Fill the Pro Steamer to the fill line, operate the Pro-Steamer on high setting and bring to a boil for 10 minutes, allow the Pro-Steamer to cool, then drain and rinse the tank and basket. This will remove all dirt particles and protective oils. You are now ready to put the Pro Steamer to work.

### **COOKING TECHNIQUES:**

Always bring the water in the tank to a full, rolling, boil before inserting the basket. Fill a clean basket with food, in a manner that allows maximum circulation of hot steam throughout the food. Place foods with longer cook times near the center and foods that cook faster on the outer edges of the basket. Once the Pro steamer is at a full boil, carefully lift the lid, place the basket into the tank, close the lid and begin timing your food. Hint: Placing a full basket of cold food into a hot Pro Steamer will reduce the interior temperature; keep the burner on high setting until the pro Steamer resumes a full boil.

### **Food Product Suggestions**

Ideal for seafood including lobster, oysters, shrimp and clams. Also perfect for hot dogs, vegetables including corn on the cob, potatoes, asparagus, broccoli and virtually anything that can be steamed!

### **Example cooking times**

Note: Times vary depending on quantity, starting temperature, density, cook ability etc...

Lobster	- - - - -	10 - 12 minutes
Corn	- - - - -	12 - 15 minutes
Potatoes (whole)	- - - - -	45 - 60 minutes
Asparagus	- - - - -	5 - 6 minutes
Small shellfish	- - - - -	4 - 7 minutes
Hot dogs (loose)	- - - - -	10 to 15 minutes

**Cooking times will increase/decrease with the amount of food placed in the basket.**

### **Tips:**

- Allow space between each food item in the basket to promote the hot steam to circulate freely
- Stir product occasionally if possible.
- Always check internal food temperatures with an appropriate thermometer and/or taste test before removing the basket or serving.

## **CLEANING AND STORAGE**

Crown Verity Inc. Pro Steamers are easily cleaned because of their all stainless steel construction.

### **For routine cleaning:**

Mix hot water and white vinegar into steamer tank. Let sit for an hour or over night if convenient. Drain; and rinse with hot water.

### **For heavy mineral build-up,**

we suggest calcium and lime remover that is safe for use on stainless steel, "C.L.R." is a good choice for this. Follow the manufacturer's instructions and always wash and rinse thoroughly.

In all cases, only use cleaning agents that are safe for use on stainless steel. Wash with mild detergent and rinse thoroughly with plenty of clean, fresh water.

Pro steamers can be thoroughly cleaned inside and out with the use of a pressure washer. Do not expose regulators, control valves, or decals to high-pressure spray.

## **STORAGE**

### DAY-TO-DAY STORAGE:

- Disconnect L.P gas cylinders and leave outdoors
- Drain and rinse the Steamer thoroughly for storage

### LONG TERM STORAGE:

To prepare your Pro Steamer for long-term storage, follow these steps:

- Clean the inside of your Pro Steamer (see cleaning and maintenance section).
- Store LP cylinders outdoors out of reach of children, away from sources of heat, and sources of ignition.
- Cover the Pro Steamer if left outdoors.
- Cover the supply hose connection(s) with cap(s) or plastic bag and elastic.

## **CYLINDERS AND REGULATORS**

The Pro Steamer's self-contained propane system is designed for use with a 9.1 kg. (20 lb.) Propane cylinder, equipped with a Type I cylinder valve. This appliance cannot be connected to a standard Type II valve (with internal left-hand threads only).

### **DO NOT CONNECT TO A PROPANE GAS CYLINDER EXCEEDING THIS CAPACITY, OR USE A CYLINDER WITH ANY OTHER TYPE OF VALVE.**

The Type I (Q.C.C.1) valve is recognizable by the large external thread on the outlet part of the valve. Standard valves do not have these exterior threads. Any attempt to fit the regulator(s) with anything other than the mating Type I (Q.C.C.1) connector, (recognized by the large plastic coupling nut) will negate the important safety features designed into the Type I (Q.C.C.1) system. Fitting a standard #510 P.O.L connector, will not provide the excess flow control or temperature shut-off safety features built into the complete Type I (Q.C.C.1) system.

The cylinder should not exceed 472 mm (18-1/2") in height and 317 mm (12-1/2") in diameter. When purchasing a cylinder for your Pro Steamer, it must be constructed and marked in accordance with the specifications of:

- a) Canada - The Canadian Transport Commission
- b) U.S.A. - The U.S. Department of Transportation

The cylinder must also be equipped with:

- a) A shut-off valve terminating in a proper cylinder valve outlet specified in current standards:
  - 1) Canada: CAN/CGA - 1.6 - M88 - Outdoor Gas Grills - Amend. 1.
  - 2) U.S.A.: ANSI/CGA-V-1-1977: Compressed gas cylinder valve outlet and inlet connections.
- b) A safety relief valve having direct communication with the vapor space of the cylinder.
- c) A collar to protect the cylinder shut-off valve.
- d) An arrangement for vapor withdrawal.
- e) A bottom ring for securing to the cylinder support assembly.

### **WARNING!**

- Always turn off the cylinder valve when your Pro Steamer is not in use.
- Handle cylinder valves with care.
- Never connect an unregulated LP gas cylinder to the Pro Steamer.
- Never store a spare cylinder under or near your Pro Steamer, or subject any cylinder to excessive heat.
- Always keep cylinder(s) securely fastened in an upright position.

## **TRANSPORTATION AND STORAGE OF LP CYLINDERS**

Although safe to use when properly handled, careless handling of a propane gas cylinder could result in fire, explosion, and/or serious injury.

### **THEREFORE:**

- Always use the protective cap provided with your cylinder whenever it is not connected to your Pro Steamer.
- Do not store in a building, garage or any other enclosed area. Store only in a well ventilated area.
- Do not store in the vicinity of any heating apparatus or in any high heat area such as a closed car or trunk.
- Do not smoke while transporting a cylinder in your vehicle.
- Do transport and store cylinder(s) in an upright position. Do not tip on its side.
- Do store out of reach of children.

### **FILLING L.P. GAS CYLINDERS:**

- Allow only qualified LP gas dealer to fill or repair cylinder(s).
- Do not allow the cylinder to be over filled.
- Make sure the LP gas dealer checks the cylinder for leaks after filling.

## HOSES AND REGULATORS

### **WARNING!**

Your Pro Steamer is designed to operate on L.P. (propane) vapor gas at a pressure regulated at 0 to 10 psi. The regulator(s) supplied with the Pro Steamer is/are set to this pressure and must be used.

This regulator is equipped with the Type I (Q.C.C.1), quick closing connection system, which incorporates the following features:

- 1) Will not allow gas to flow until a positive seal has been made.
- 2) Has a thermal element that will shut off the flow of gas if subjected to temperatures between 115° and 150°C (240° & 300°F).
- 3) Has a flow limiting device which, when activated, will restrict the flow of gas to 10 cubic feet per hour.

### **TYPE I CYLINDER CONNECTIONS:**

If the large plastic thermally sensitive coupling nut is exposed to temperatures above 115° - 150°C, it will soften and allow the regulator probe to disengage from the cylinder valve, thereby shutting off the flow of gas. Should this occur: do not attempt to reconnect the nut. Remove the entire hose and regulator assembly and replace it with a new one (see parts list).

The cause of the excessive heat should be determined and corrected before operating your Pro Steamer again. The regulator probe also contains a flow-sensing element, which will limit the flow of gas to the regulator to a manageable amount (10 cubic feet per hour) in the event of a hose or regulator failure, or a severe leak.

If it is evident that the flow-limiting device has activated, the cause of the excessive flow must be determined and corrected before using your Pro Steamer again.

NOTE: Improper lighting procedures can cause the flow-limiting device to activate, resulting in reduced heat output. If this is suspected, shut off the burner control and cylinder valve, and carefully repeat lighting instructions step by step. Do not remove the nut and probe and do not attempt to connect to anything other than a mating Type I (Q.C.C.1) cylinder valve.

- Never connect the Pro Steamer to an unregulated propane gas supply or other gas.
- Do not attempt to alter the hose or regulator in any way.
- Do not allow the hose to come in contact with any hot surfaces of the Pro Steamer.
- Visually inspect the entire length of the hose assembly before each use for any evidence of damage (cuts, cracks, burns) or excessive wear. If found, replace the assembly before using your Pro Steamer. Only a hose assembly as specified in the parts list for your Pro Steamer can be used.
- The connection fitting must be protected when disconnected from the propane cylinder. If the fitting is allowed to drag on the ground, damage to the fitting may occur resulting in leaks or an incomplete connection. Dirt could also enter the small inlet hole, blocking gas flow completely. parts list for your Pro Steamer can be used.

## LEAK TESTING

- **Never check for leaks with a match or open flame.**

Leak testing must be performed:

- Before lighting your Pro Steamer for the first time.
- Every time the propane cylinder is refilled, replaced, or any gas component is replaced. (or)
- At least once per year.

Perform the leak test outdoors in a well-ventilated area, away from any open flame, heat or ignition sources. **DO NOT SMOKE!** Use only a 50/50 mixture of liquid soap and water for leak testing. Do not use a match or open flame.

### **THE FOLLOWING MUST BE CHECKED:**

- Cylinder valve including threads into tank.
- All cylinder welds.
- Control Regulator fitting(s) and cylinder connection.
- All hose and manifold connections.

- 1) Open LP cylinder valve to the Pro Steamer
- 2) Brush soap solution on all connections and components listed above.
- 3) Observe each place for growing bubbles, which indicate a leak, is present.
- 4) Tighten any leaking connection until a repeat test shows no evidence of leakage (shut off gas supply while correcting any leaks).

**DO NOT USE THE Pro Steamer IF ANY LEAKS CANNOT BE STOPPED. TURN OFF THE GAS SUPPLY VALVE, REMOVE THE GAS CYLINDER, AND CALL A QUALIFIED GAS APPLIANCE SERVICE PERSON FOR REPAIRS.**

**WARNING! - NATURAL HAZARD** - Spiders and other insects are attracted by the smell of gas and could make webs or nests in the burner. This could partially or completely block the flow of gas through the burner and is indicated by a sooty, yellow flame, and/or a burner that is difficult or impossible to light. Ultimately, it may cause the gas to burn inside the burner or at the air inlet, which can seriously damage your Pro Steamer. If this happens: immediately shut off the propane at the cylinder, valve

To prevent and/or correct this occurrence, periodically check the burner for obstructions by inserting a pipe cleaner or flexible wire through the air inlet of the burner, and twisting it.

## TROUBLESHOOTING GUIDE

WHAT HAPPENS	WHAT TO LOOK FOR
1) Burners will not light	Propane tank is empty. Incorrect lighting procedures. Is the cylinder valve turned on? Regulator assembly not fully tightened to cylinder valve? Large plastic nut on cylinder connector may be cracked or has been overheated, may be wobbling and is not making a gas tight seal inside cylinder valve. Remedy: Replace regulator and hose assembly.
2) Burner is not hot enough	Control valve left open before opening cylinder valve or leak in system causing flow control device to activate. -Follow proper lighting sequence or correct leak in system. Inspect burner for obstructions
3) Pro Steamer goes out	Slowly and gradually increase the gas supply from the control regulator. The cylinder pressure has dropped below operating pressure due to freeze-up. Long periods of full- open operation will cause this. Remedy: exchange L.P cylinder with a full one techniques page 11.

**GAS COMPONENTS REFERENCE**

**PARTS AND COMPONENTS**

DESCRIPTION	PART #	QTY
STEAMER BODY ASSY.	9010	1
STEAMER LID (INCLUDED WITH TANK)	9011	1
UNDER SHELF	8071	1
STEAMER BASKET	9020	1
HOSE & REG ASSY.	2300	1
OPERATOR FRONT LEFT LEG	2217	1
OPERATOR FRONT RIGHT LEG	2213	1
OPERATOR BACK LEFT LEG	2218	1
OPERATOR BACK RIGHT LEG	2212	1
BURNER W/ ORIFICE	9060	1
14" WHEELS	2141	2
5" CASTER	2216	2
STAINLESS STEEL AXLE	2215	1
BRONZE NAME PLATE	2003	1
HANDLE 9"	2219	2
LIGHTING INSTRUCTIONS DECAL	2205-S	1
RATING PLATE DECAL	2206-S	1
1/4"-20x5/8" HEX BOLT	2026	4
1/4" FENDER WASHER 1.25" O.D.	2019	4
5/16" INT. TOOTH LOCK WASHER	2013	22
5/16"-18 FULL HEX NUT	2014	22
5/16"-18x5/8" RSLMS	2142	22
1/2" FLAT WASHER	2146	5
1/8"x1 COTTER PIN	2148	2
1/2"-13x5/8" HEX BOLT ZINC	2031	2
CAUTION HOT STEAM DECAL KIT	9040	4
CASTER BRACKET	2220	2
CASTER MOUNT	2211	2
3/4" BALL VALVE	9050	1
3/8" FEM FLR x 1/4" MPT	9051	1
1/4" x 3/8" ELBOW	9052	1
3/8" FPT x 3/8" FLR	9053	1
3/8" x 8" BRASS NIPPLE	9054	1

Due to a continuous program of product improvement Crown Verity Inc. reserves the right to make changes in design.

TO ORDER PARTS PLEASE CONTACT

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